



Bioeconomy in the European Green Deal

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BIOEAST Foresight Conference
Climate-neutral future depends on sustainable bioeconomies
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The EU Bioeconomy Strategy and Action Plan

- **SUSTAINABILITY and CIRCULARITY** at its core
- **SYSTEM-wide** approach
- **Policies across sectors, addressing trade-offs, co-benefits**
- **More than research & innovation**
- **Delivering for the citizens, in particular in rural areas**
- **A set of 14 well-defined actions including a monitoring system with clear indicators**

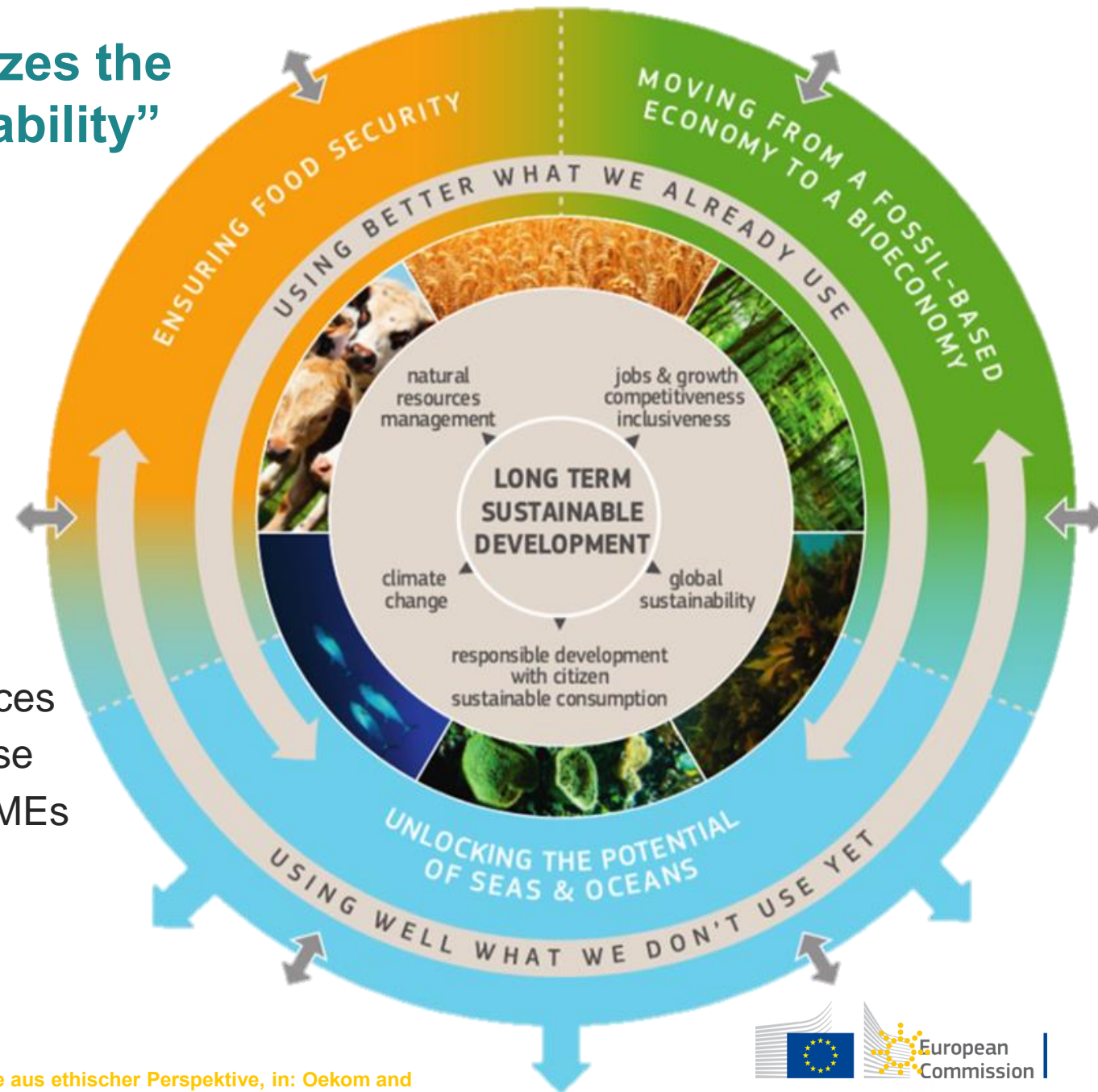


“The bioeconomy operationalizes the innovative aspects of sustainability”

- Vogt, 2020

A model for green growth:

- Holistically address the economic, social and environmental aspects of the transition
- Build a climate-neutral future
- Protect biodiversity and ecosystems
- Reduce dependence on non-renewable resources
- Modernise and strengthen the EU industrial base
- Create new green business opportunities for SMEs
- Enhance resource efficiency and circularity





“The European Green Deal is Europe’s Man on the Moon Moment” December 2020

“The fossil fuel economy has reached its limits!” July 2021

#EUGreenDeal



European
Commission



“ *With its potential to connect and implement transformative policies holistically, the bioeconomy will contribute to all dimensions and objectives of the European Green Deal. Research and innovation will enable Europe to lead the green and digital transition.* ”

Mariya Gabriel, EU Commissioner for Innovation, Research, Culture, Education and Youth

*Research and
Innovation*

A circular and sustainable bioeconomy has the potential to contribute to all dimensions and objectives of the European Green Deal by:

- **Delivering on Europe’s economic prosperity and ensuring a fair and just transition.**
- **Producing fossil-free materials for a climate-neutral future.**
- **Enhancing the protection of the environment and ecosystems.**

See Factsheet on **How the bioeconomy contributes to the Green Deal** (<https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/66722c8d-2e03-11eb-b27b-01aa75ed71a1>)

Bioeconomy & The European Green Deal

CLIMATE PACT AND CLIMATE LAW

Carbon sequestration in soils, blue carbon and forests and material substitution of fossil-based products (plastics, energy, textiles) can generate significant carbon savings.

INVESTING IN SMARTER, MORE SUSTAINABLE TRANSPORT

Urban bioeconomy policies across Europe promote the innovative transformation towards sustainable transportation.

STRIVING FOR GREENER INDUSTRY

The local deployment of one biorefinery can create up to 4000 jobs in four years and better recycling of high value organic waste in cities could create 1200 new jobs in the long run.

ELIMINATING POLLUTION

Up to 12 million tons of plastic are dumped in our oceans every year, but with the help of bioeconomy this amount can be reduced by 90% by 2025.

The bioeconomy will create 1 million new green jobs by 2030, in particular in rural and coastal areas.

The European Circular Bioeconomy Fund, with a volume of up to 250 million EUR will invest in innovative circular bioeconomy projects, in the areas of agriculture, aquaculture and fishery, forestry, biochemical and biomaterials.

ENSURING A JUST TRANSITION FOR ALL

FINANCING GREEN PROJECTS

MAKING HOMES ENERGY EFFICIENT

The use of 1 ton of wood instead of 1 ton of concrete in construction can lead to 2.1 ton carbon dioxide reduction construction.

LEADING THE GREEN CHANGE GLOBALLY

The European Commission leads global bioeconomy initiatives, such as the International Bioeconomy Forum.

FROM FARM TO FORK

Avoiding food waste can save up to €143 billion annually. Algae farming can be a new source of renewable biomass for food and green products. Algae has the advantage of producing potentially high yields with minimum land requirements.

PROTECTING NATURE

A sustainable bioeconomy values natural resources, diminishes environmental pressures and increases the use of sustainable renewable products, restores and enhances ecosystems' functions and biodiversity.

PROMOTING CLEAN ENERGY

Unavoidable waste can be converted into energy including fuels for sectors for which electrifications is still challenging (aviation, maritime).

Farm to Fork at the heart of the European Green Deal



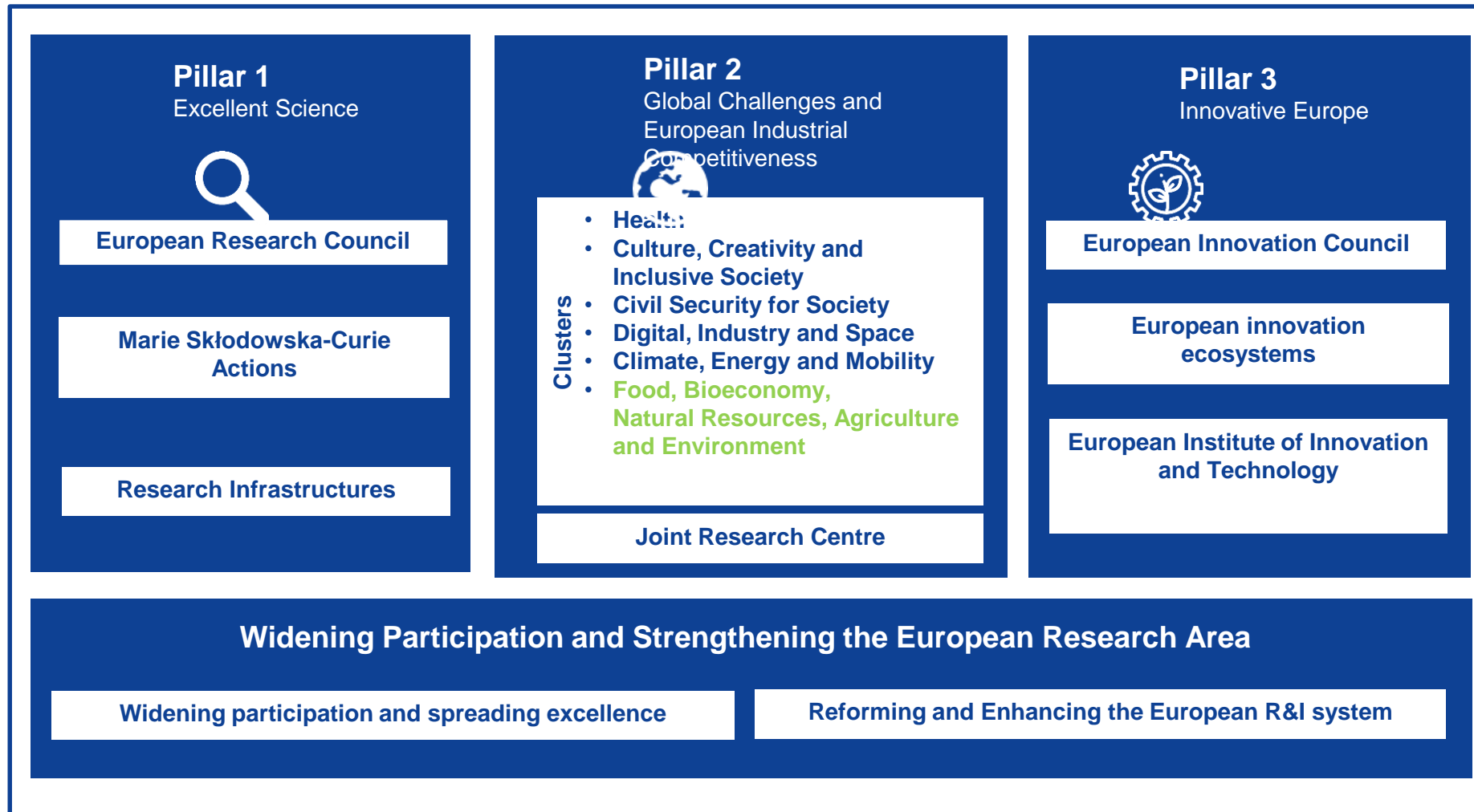
2030 Targets for sustainable food production

PESTICIDES	NUTRIENT LOSSES	ANTIMICROBIALS	ORGANIC FARMING
<p>50%</p>	<p>50%</p>	<p>50%</p>	<p>25%</p>
Reduce the overall use and risk of chemical and hazardous pesticides	Reduce nutrient losses by 50% whilst retaining soil fertility, resulting in 20% less fertilisers	Reduce sales of antimicrobials for farmed animals and aquaculture	Increase the percentage of organically farmed land in the EU

Next steps

- Bioeconomy Progress Report (Q1 2022)
 - Reporting on the progress of the implementation of the 2018 EU Bioeconomy Strategy, as well as the general progress of the bioeconomy in Europe
 - Framing the bioeconomy within the new policy context, e.g. the European Green Deal
- European Bioeconomy Policy Forum
 - High-level platform to exchange between Member States and the Commission on recent developments in the bioeconomy
- Major Bioeconomy Conference in Brussels on 8th and 9th June 2021
 - High-level participation of bioeconomy policy makers and stakeholders
 - Objectives: present the findings of the Progress Report; and outline and discuss the pathways for sustainable bioeconomy towards 2050

Horizon Europe: structure & resources



**EUR 8,952 billion under Horizon Europe
for Cluster 6 “Food, Bioeconomy, Natural Resources, Agriculture and
Environment”**

Cluster 6 WP 2021-2022: 2022 calls

Name of the destination	Opening date	Deadline	Number of topics
1. Biodiversity and Ecosystem Services	28/10/2021	15/02/2022	10
	28/10/2021	15/02/2022	3
2. Fair, healthy and environmentally-friendly food systems from primary production to consumption	28/10/2021	15/02/2022	15
	28/10/2021	15/02/2022	5
3. Circular economy and bioeconomy sectors	28/10/2021	15/02/2022	7
	28/10/2021	15/02/2022	6
4. Clean environment and zero pollution	28/10/2021	15/02/2022	4
5. Land, oceans and water for climate action	28/10/2021	15/02/2022	5
6. Resilient, inclusive, healthy and green rural, coastal and urban communities	28/10/2021	15/02/2022	5
	28/10/2021	15/02/2022	2
7. Innovative governance, environmental observations and digital solutions in support of the Green Deal	28/10/2021	15/02/2022	15
TOTAL			77

Horizon Europe Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

- Institutionalised Partnerships (Art 185/7)
- Institutionalised Partnerships / EIT KICs
- Co-Programmed
- Co-Funded

* *Calls with opening dates in 2023-24*

** *Calls with opening dates not before 2022*

PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II & III

European Open Science Cloud

Info-days for Cluster 6 2022 topics

- Your opportunity to participate!
- 25-26 October
- Short plenary session + thematic sessions on 77 topics
- Brokerage event

Thank you

The EU's Bioeconomy Policy:

<https://ec.europa.eu/research/bioeconomy/>

The Fit 4 55 package:

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

Horizon Europe – Cluster 6:

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-6-food-bioeconomy-natural-resources-agriculture-and-environment_en

Horizon Europe Cluster 6 Work Programme 2021-2022:

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-9-food-bioeconomy-natural-resources-agriculture-and-environment_horizon-2021-2022_en.pdf

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